MODULE 8

FORCIBLE ENTRY

Student Guide

Introduction

Welcome to Module 8, Forcible Entry. During this module, we will discuss some safe and effective methods to forcibly enter buildings and vehicles.

Purpose The purpose of this module is to provide you, the recruit firefighter, a basic understanding of how to enter a structure of various building materials using safe, effective, and appropriate forcible entry techniques. This training is mandated by state regulation for all entry level firefighters.

Scope For the next hour, we will demonstrate, discuss, and conduct practical exercises on various types of materials used in walls, doors, ceilings, and windows, and then learn safe, effective, and appropriate forcible entry techniques. We will be conducting practical exercises on portions of the material taught.

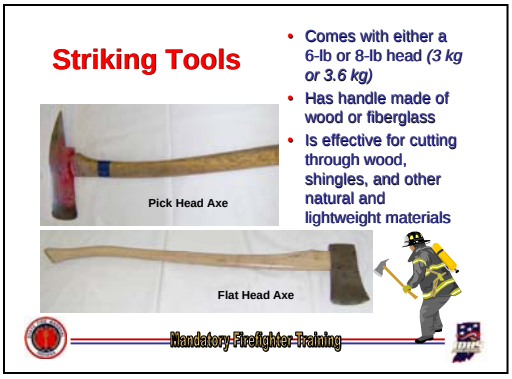
Objectives By the end of this module, you will:

1. Know when forcible entry is needed.
2. Know manual forcible entry tools.
3. Know power forcible entry tools.
4. Know typical construction problems to include: firewalls versus stud wall construction; steel, metal, concrete roofs versus wood frame construction; steel versus wood doors; specialized window construction (including plate and laminated glass).

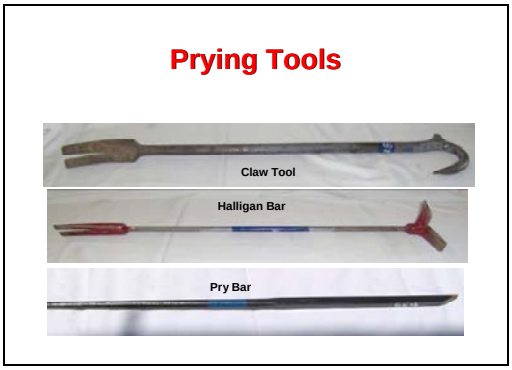
Conditions The instruction you receive in this module is intended for firefighter recruits, meaning, it is our assumption that you know little or nothing about firefighting. Instruction will take place here in a classroom environment. We will use lecture, conference, demonstration, and practical exercise methods to deliver your instruction.

Types Of Tools Used For Forcible Entry

Striking Striking tools are used to deliver impact force to break lock or drive another tool. (Examples: Flathead axe, maul, sledgehammer, battering ram, hammer, punch & chisel, lock breaker.)



Prying Prying tools are used to provide mechanical advantage or leverage. (Examples: Crowbar, Halligan tool, hux, claw tool, pry bar, hydraulic tool.)



Cutting Cutting tools are used to cut material away; cut around locking devices, cut through a door, cut through a roof or wall. (Examples: Axes, saws, torches, bolt cutters.)

Pushing/Pulling Pushing/Pulling tools are used on a limited basis forcible entry; breaking glass, Gypsum board or sheetrock. (Examples: Hooks, pike poles.)

Power Saws

Rotary (circular) saw
- Is most often gasoline powered and has changeable blades.
- Often spins blades more than 6,000 rpm.

Chain saw
- Has been used for years by the logging industry.
- Is finding a place in the fire service especially during natural disasters.

Ventilation saw
- Is more efficient than rotary saw
- Is sometimes overlooked, because it is a newcomer

Power Saw Cautions
- Do not push a saw beyond the limits of its design and purpose.
- Never use a power saw in a flammable atmosphere.
- Always use eye protection when operating any power saw.

Safety Considerations While Using Forcible Entry Tools.

Rotary and chain saws Entryways such as gates, overhead or personnel entry type doors, and windows have become increasingly more secure. They often require more than a mere prying tool to open them. The rotary or chain power saw has become the tool that can most rapidly remove the door or gate. These saws present a number of hazards of which firefighters must be aware in order to operate them safely.
- Always follow the manufacturer's instructions.
- Conduct daily checks for operation and blade condition.
- Check the saw for fuel and proper operation before proceeding to the entry location.
- Equip the saw with a carry strap (standard equipment with some manufacturers).
- Use the right blade for the material being cut.
- Never carry a running saw up a ladder or through a crowd of firefighters.
- Power saws require two firefighters: the saw operator and a guide firefighter.

Carrying tools Many forcible entry tools have sharp or pointed ends and must be carried safely from fire apparatus to the fire scene. Firefighters should always be aware of their safety in addition to the safety of other firefighters.

- Axes. Carry the axe with the blade away from the body and the pick head covered.
- Never carry an axe over the shoulder.
- Prying tools. Similar to the axe, pointed and sharp edges should be carried away from
- the body and covered if possible.
- Hooks or pike poles. The tool head, the hook end, should be carried down and close to
- the ground. Depending on handle length, beware of overhead electrical wires and
- other obstructions. Inside a building, carry the handle close to the body with the
- hooked end toward the ceiling.
- Striking tools. These tools tend to be heavy and the head should be carried close to the
- ground. When using these tools do not use a free-swing motion. Firmly grasp the tool
- with two hands and use a controlled and accurate stroke to move the tool.

Typical Construction Problems

Firewalls versus stud wall construction.

Steel, metal, or concrete roofs versus wood frame construction.

Steel versus wood doors.

On occasion a firefighter may be required to force entry through a wall.

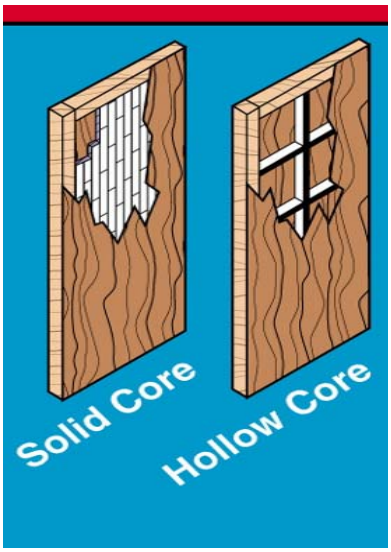
- Load bearing wall supports the building's ceilings and/or rafters.
- Non-bearing wall can be removed safely and without danger. Can also be called partition walls.
- Exterior Walls
    - Constructed of one or more materials.
    - Many residential structures are commonly constructed of brick or wood frame.
    - Commercial building walls are commonly constructed of concrete, masonry or metal.

Interior Walls

- Many residential structures are commonly constructed of wood or metal studs covered by gypsum, plaster or sheetrock.
- Breaching an interior wall can be dangerous because:
- Electrical wiring
- Plumbing
- Cable wires
- Phone wires
- Floors. Most popular floor construction in residential and commercial buildings are wood and poured concrete. Both are tough to breach and require power tools.

Usually the best point to attempt forcible entry to a structure is the door or window.

Doors and windows are constructed as entry points and are generally of weaker materials than walls or roofs.



Basic door construction

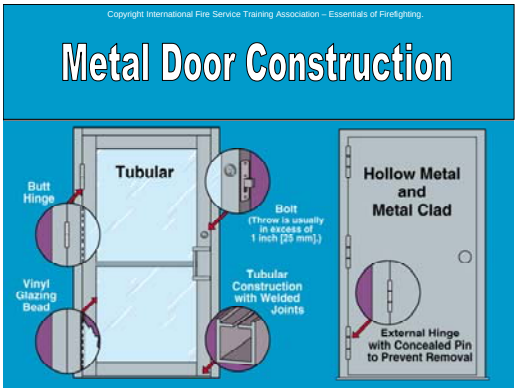
- Door – the entryway itself
- Jamb – the frame
- Hardware – the hinges and handles
- Locking device

Wood Door Construction

- Solid core – wood core blocks covered by a face panel.
- Hollow-Core – lightweight, honeycomb interior covered by a face panel.

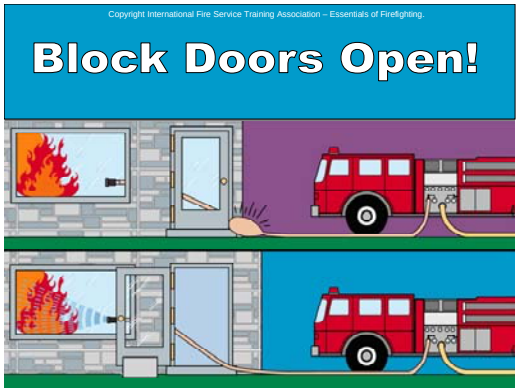
Metal Door Construction

- Decorative for residential use
- May be either hollow or solid core



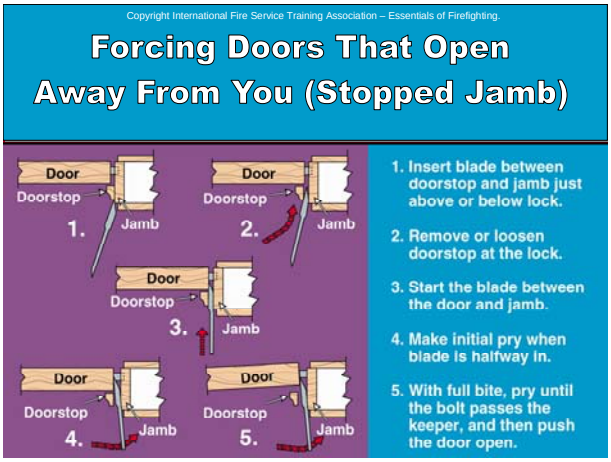
Guidelines for opening doors.

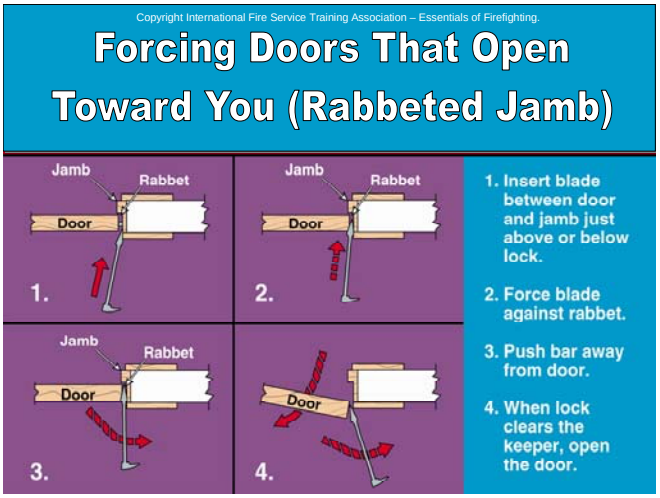
- • Try before you pry!
- • Examine construction.
- • Determine method of operation.
- • Examine lock.
- • Force? Find other method of entry?
- • Use easiest, least damaging method.

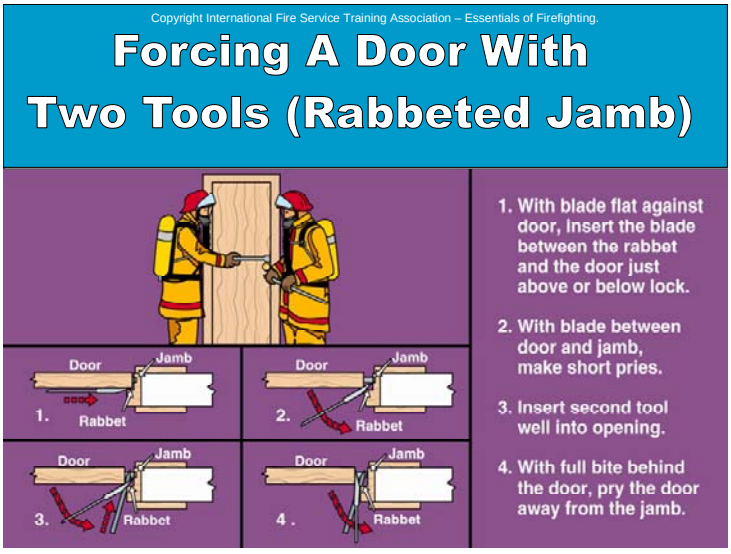


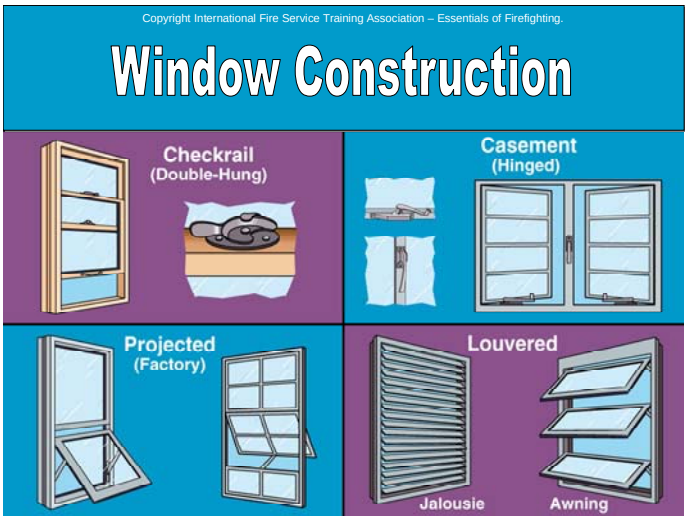
Six basic methods of forcing a door.

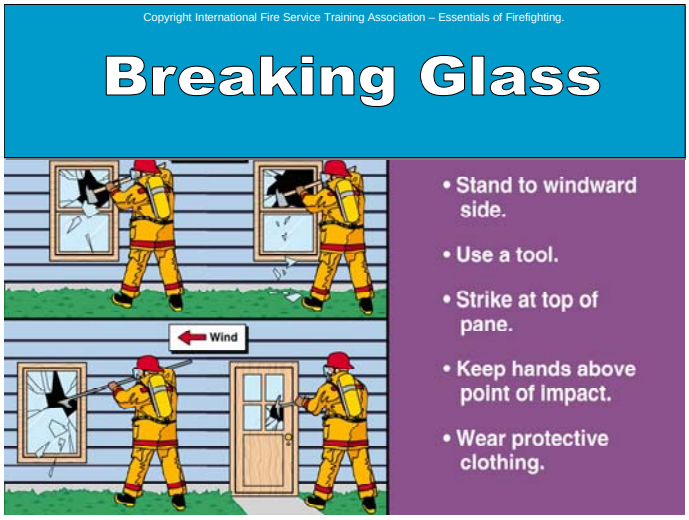
- • Removing the hinge pins
- • Breaking the glass and unlocking from inside
- • Breaking the lock
- • Prying the door and jamb apart
- • Cutting an entry hole
- • Battering the door down

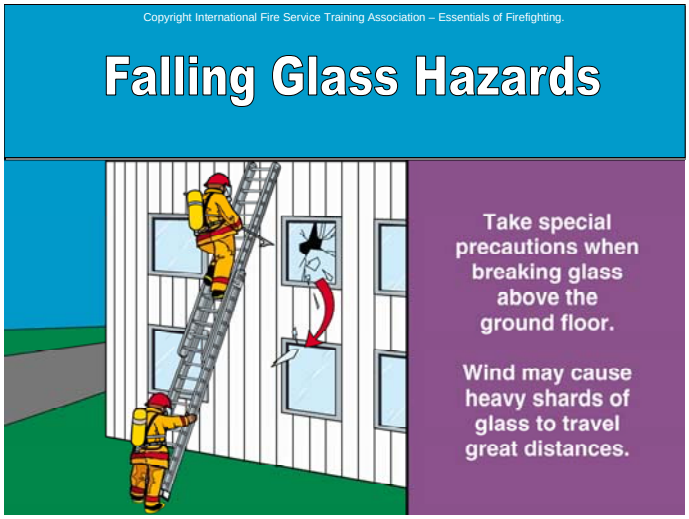







Copyright International Fire Service Training Association – Essentials of Firefighting.
Window Construction
Checkrail
(Double-Hung)
Casement
(Hinged)
Projected
(Factory)
Louvered
Jalousie
Awning


Copyright International Fire Service Training Association – Essentials of Firefighting.
Breaking Glass
Wind
• Stand to windward side.
• Use a tool.
• Strike at top of pane.
• Keep hands above point of impact.
• Wear protective clothing.


Copyright International Fire Service Training Association – Essentials of Firefighting.
Falling Glass Hazards
Take special precautions when breaking glass above the ground floor.
Wind may cause heavy shards of glass to travel great distances.

Review and Closing

Review During this module, we have discussed some things relating to forcible entry. These included:

1. Knowing when forcible entry is needed.
2. Knowing manual forcible entry tools.
3. Knowing power forcible entry tools.
4. Knowing typical construction problems to include: firewalls versus stud wall construction; steel, metal, concrete roofs versus wood frame construction; steel versus wood doors; specialized window construction (including plate and laminated glass).

Closing A firefighter must be able to enter the scene safely and effectively. This was an introduction to what you will learn in future training. It is critical to your survival and the survival of brother firefighters and victims.